

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of the claims in this application:

Listing of the Claims:

Claims 1-10. (Cancelled).

11. (Previously presented) An assembled threaded implant for implantation between adjacent vertebrae in the spine of a patient comprising two or more threaded sections of cortical bone that are joined together in tandem by pins to form an implant that is longer than it is wide, said pins interconnecting said threaded sections to form an elongated body from about 5 mm to about 25 mm in length wherein all longitudinal surfaces are continuously tapered and threaded, said elongated body also having a first end having a first diameter for initially engaging adjacent vertebrae and an opposing second end having a second diameter that is larger than said first diameter, said second end also being slotted for engaging a driving and securing device.

12. (Previously presented) The implant of claim 11, wherein said implant is comprised of two threaded sections of cortical bone.

13. (Previously presented) The implant of claim 11, wherein said two or more sections of cortical bone comprise joining holes formed therein such that said two or more sections are joined together by insertion of said pins through said joining holes.

14. (Previously presented) The implant of claim 13, wherein said pins are cortical bone.

15. (Cancelled).

16. (Previously presented) The implant of claim 11, wherein said cortical bone is obtained from a bone selected from the group consisting of femur, tibia, fibula, humerus, radius and ulna.

17. (Previously presented) The implant of claim 11, comprising a channel formed in said elongated body, to aid in delivery of a biologically active substance disposed on or within the implant to surrounding tissue.

18. (Previously presented) The implant of claim 17, wherein said biologically active substance comprises one or more substances selected from the group consisting of cells, growth factors, antibiotics, nucleic acids, proteins, peptides, antineoplastics, and anti-inflammatory compounds.

19. (Previously presented) The implant of claim 11, wherein said cortical bone is human allograft bone or xenograft bone.

20. (Previously presented) An assembled implant comprising an elongated body having a first end for initially engaging adjacent vertebrae and second end that is slotted for engaging a driving and securing device,

said elongated body comprising two threaded sections of cortical bone connected in tandem by two pins, said elongated body from about 5 mm to about 25 mm in length wherein all longitudinal surfaces are continuously tapered and threaded,

said continuously tapered and threaded surface beginning at a first position on or proximate to said first end and extending throughout the length of said elongated body down to a second position on or proximate to said second end.

21. (Cancelled).

22. (Previously presented) The implant of claim 20, comprising a channel formed through said elongated body such that said channel is positioned transverse to the

longitudinal axis of said implant, said channel suitable to having a biologically active substance disposed therein.

23. (Previously presented) A method for fusing vertebrae comprising, making a space between the vertebrae to be fused, and inserting into said space an assembled implant, said implant comprising two threaded and continuously tapered sections of cortical bone connected in tandem by two bone pins to form an elongated body having first end for initially engaging adjacent vertebrae, and a second end that is slotted for engaging a driving and securing device,

wherein said elongated body is from about 5 mm to about 25 mm in length, and having all longitudinal surfaces continuously tapered and threaded,

wherein said continuously tapered and threaded surfaces begins at a first position on or proximate to said first end and extends throughout the length of said elongated body down to a second position on or proximate to said second end,

whereby inserting said biomedical implant into said space between the vertebrae allows said vertebrae to become fused.

24. (Cancelled).

25. (Previously presented) The implant of claim 20, wherein said two pins are two cortical bone pins.

26. (Cancelled)

27. (Previously presented) An assembled threaded implant for implantation between adjacent vertebrae in the spine of a patient comprising two or more threaded sections of cortical bone, each two sections of cortical bone are joined together in tandem by two pins to form an implant that is longer than it is wide, said pins interconnecting opposing holes in said threaded sections to form an elongated body from about 5 mm to about 25 mm in length wherein all longitudinal surfaces are continuously tapered and threaded, said elongated body also having a first end having a first diameter for initially

engaging adjacent vertebrae and an opposing second end having a second diameter that is larger than said first diameter, said second end also including a shape for engaging a driving and securing device, said pins suited for conveying torsional load between said threaded sections as said threaded sections are rotatedly advanced between said vertebrae.

28. (Previously presented) The implant of claim 27, having two threaded and continuously tapered sections of cortical bone.

29. (Previously presented) The implant of claim 27, wherein said second end includes a slot formed thereon.

30. (Previously presented) The implant of claim 27, wherein said second end includes a square driver.

31. (Previously presented) The implant of claim 27, wherein said second end includes a hexagonal driver.

32. (Previously presented) The implant of claim 27, wherein said second end includes two or more pinch cut outs.

33. (Previously presented) The implant of claim 27, wherein said second end includes two pinch cut outs.